

## **AMENDMENTS**

### **IN THE CLAIMS**

1-15 (**Canceled**)

16. (**Currently Amended**) A method of inhibiting a binding event between a target protein (T) and a binding protein (P), comprising:

administering to a cell ~~cells-in-vitro~~ an effective amount of a non-naturally occurring bifunctional inhibitor molecule (I) of less than 5000 daltons consisting essentially of:

- (a) a target protein ligand that specifically binds to a target protein (T); and
- (b) a blocking protein ligand that specifically binds to a blocking protein (B),

wherein said target protein ligand and said blocking protein ligand are covalently bonded to each other, optionally through a linking group;

in order to non-covalently bind the target protein (T) and the blocking protein (B) to produce a tripartite complex (T-I-B) that prevents access of the binding protein (P) to the target protein (T).

17. (**Original**) The method according to Claim 16, wherein said bifunctional inhibitor molecule comprises a linking group.

18. (**Previously Presented**) The method according to Claim 16, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein that is also bound by said binding protein (P).

19. (**Previously Presented**) The method according to Claim 16, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein (T) that is not bound by said binding protein (P).

20. **(Original)** The method according to Claim 16, wherein said tripartite complex is produced intracellularly.

21. **(Original)** The method according to Claim 16, wherein said tripartite complex is produced extracellularly.

22. **(Previously Presented)** The method according to Claim 16, wherein said blocking protein (B) is endogenous to said cells.

23. **(Previously Presented)** The method according to Claim 22, wherein said blocking protein (B) is selected from the group consisting of: peptidyl-prolyl isomerases, Hsp90 (Heat shock protein 90), steroid hormone receptors, cytoskeletal proteins, albumin and vitamin receptors.

24. **(Previously Presented)** The method according to Claim 16, wherein said bifunctional inhibitor molecule (I) is administered as a pharmaceutical preparation.

25.-48. **(Canceled)**

49. **(Currently Amended)** A method of inhibiting a binding event between a target protein (T) and a binding protein (P), comprising:

administering to a cell ~~cells in vitro~~ an effective amount of a non-naturally occurring bifunctional inhibitor molecule (I) of less than 5000 daltons consisting essentially of:

- (a) a target protein ligand that specifically binds to a target protein (T) with a binding affinity of at least about  $10^{-4}$  M; and
- (b) a blocking protein ligand that specifically binds to a blocking protein (B), wherein said blocking protein ligand is a peptidyl-prolyl isomerase ligand,

wherein said target protein ligand and said blocking protein ligand are covalently bonded to each other, optionally through a linking group;

in order to non-covalently bind the target protein (T) and the blocking protein (B) to produce a tripartite complex (T-I-B) that prevents access of the binding protein (P) to the target protein (T).

50. **(Previously Presented)** The method according to Claim 49, wherein said bifunctional inhibitor molecule comprises a linking group.

51. **(Previously Presented)** The method according to Claim 49, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein that is also bound by said binding protein (P).

52. **(Previously Presented)** The method according to Claim 49, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein (T) that is not bound by said binding protein (P).

53. **(Previously Presented)** The method according to Claim 49, wherein said tripartite complex is produced intracellularly.

54. **(Previously Presented)** The method according to Claim 49, wherein said blocking protein (B) is endogenous to said cells.

55. **(Previously Presented)** The method according to Claim 49, wherein said bifunctional inhibitor molecule (I) is administered as a pharmaceutical preparation.

56. **(Currently Amended)** A method of inhibiting a binding event between a target protein (T) and a binding protein (P), comprising:

administering to a cell ~~cells in vitro~~ an effective amount of a non-naturally occurring bifunctional inhibitor molecule (I) of less than 5000 daltons consisting essentially of:

- (a) a target protein ligand that is known to specifically bind to a target protein (T);  
and
- (b) a blocking protein ligand that is known to specifically bind to a blocking protein (B),

wherein said target protein ligand and said blocking protein ligand are covalently bonded to each other, optionally through a linking group;

in order to non-covalently bind the target protein (T) and the blocking protein (B) to produce a tripartite complex (T-I-B) that prevents access of the binding protein (P) to the target protein (T).

57. **(Previously Presented)** The method according to Claim 56, wherein said bifunctional inhibitor molecule comprises a linking group.

58. **(Previously Presented)** The method according to Claim 56, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein that is also bound by said binding protein (P).

59. **(Previously Presented)** The method according to Claim 56, wherein said bifunctional inhibitor molecule (I) binds to a site of said target protein (T) that is not bound by said binding protein (P).

60. **(Previously Presented)** The method according to Claim 56, wherein said tripartite complex is produced intracellularly.

61. **(Previously Presented)** The method according to Claim 56, wherein said tripartite complex is produced extracellularly.

62. **(Previously Presented)** The method according to Claim 56, wherein said blocking protein (B) is endogenous to said cells.

63. **(Previously Presented)** The method according to Claim 62, wherein said blocking protein (B) is selected from the group consisting of: peptidyl-prolyl isomerases, Hsp90 (Heat shock protein 90), steroid hormone receptors, cytoskeletal proteins, albumin and vitamin receptors.

64. **(Previously Presented)** The method according to Claim 56, wherein said bifunctional inhibitor molecule (I) is administered as a pharmaceutical preparation.

65. **(New)** The method according to Claim 16, wherein said blocking protein ligand is a peptidyl-prolyl isomerase ligand.

66. **(New)** The method according to Claim 65, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

67. **(New)** The method according to Claim 65, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

68. **(New)** The method according to Claim 67, wherein said ligand for an FKBP is selected from the group consisting of FK506 and rapamycin.

69. **(New)** The method according to Claim 65, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

70. **(New)** The method according to Claim 69, wherein said ligand for a cyclophilin is a cyclosporin.

71. (New) The method according to Claim 49, wherein said blocking protein ligand is a peptidyl-prolyl isomerase ligand.

72. (New) The method according to Claim 71, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

73. (New) The method according to Claim 71, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

74. (New) The method according to Claim 73, wherein said ligand for an FKBP is selected from the group consisting of FK506 and rapamycin.

75. (New) The method according to Claim 71, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

76. (New) The method according to Claim 75, wherein said ligand for a cyclophilin is a cyclosporin.

77. (New) The method according to Claim 56, wherein said blocking protein ligand is a peptidyl-prolyl isomerase ligand.

78. (New) The method according to Claim 77, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP or cyclophilin.

79. (New) The method according to Claim 77, wherein said peptidyl-prolyl isomerase ligand is a ligand for an FKBP.

80. (New) The method according to Claim 79, wherein said ligand for an FKBP is selected from the group consisting of FK506 and rapamycin.

81. (New) The method according to Claim 77, wherein said peptidyl-prolyl isomerase ligand is a ligand for a cyclophilin.

82. (New) The method according to Claim 81, wherein said ligand for a cyclophilin is a cyclosporin.